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Economic Conditions
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General Business Conditions

TRADE and industry during the month of September has measured up handsomely to its favorable advance notices. There is no question but that a condition of prosperity pervades most sections of the country.

The political campaign has been without noticeable influence. The unemployment scare of the Winter has passed away, and factory employment and payrolls in many localities are showing gains as compared with a year ago.

Business profits proved to be unexpectedly good for the first and second quarters in the face of admittedly adverse conditions and with the improvement in business that has taken place since are counted on to make a still better showing for the third and fourth quarters.

Production in the steel, automobile and various other leading industries is breaking all previous records. The composite index of industrial production computed by the Standard Statistics Company (in which allowance is made for seasonal variation) rose in August to the highest level ever reached.

Railway traffic is increasing and in the first half of September was larger than a year ago. While it is true that loadings are still much below those at this time in 1926, traffic at that time was greatly swelled by the heavy movement of coal for export traceable to the British coal strike. Of greater significance is the fact that the movement of general merchandise and miscellaneous freight is running larger than in either 1927 or 1926.

The improvement which has taken place in such industries as oil and the non-ferrous metals, long in the doldrums, has helped to inspire confidence, and last but not least the abundant crops and general betterment in the condition of agriculture are looked upon as bound to strengthen the basis of prosperity.

Reflecting this imposing array of favorable influences most of the doubts about business have vanished and sentiment is riding high on the crest of the wave. An indication of the exuberance which characterizes business and speculative opinion is the determined way in which stock prices have been bid up in the face of an abnormally high level of stock market money rates.

Influence of Tight Money

The firmer trend of money rates continues to be an outstanding development and one which, if it persists, may exercise a restraining influence on business. While there is no reason to fear a shortage of funds for commercial purposes, the competition of a strong and active stock market for credit at a time when the country's basic reserves of gold have been reduced by more than half a billion dollars is forcing a higher level of rates all around. Though the current firmness of money has not seriously inconvenienced merchants who are borrowing for short periods, as in the ordinary commercial credit, it has had an important effect on the investment market where the offering of new capital issues has been very sharply curtailed. During the months of July and August the volume of new flotations was the smallest for any corresponding period since 1923, and while offerings have made a much better showing in September the market is still considerably restricted.

Inasmuch as the construction of new buildings and equipment, and expansion of industrial capacity generally, is largely financed through the investment market, a restricted market for new borrowings leads ultimately to a reduction in the volume of expenditures for labor and materials and so effects the general business situation.

Building statistics published in recent months give some evidence of a decline in projected new construction, permits applied for and contracts awarded throughout the country falling off in July and again in August, with the totals in the latter month somewhat below the corresponding figures for last year. Large contractors report that many projects are being held up by the unfavorable conditions for financing, and the inference is that if tight money conditions continue a substantial shrinkage in building activity may result.

Building Already Under Contract Sufficient to Insure Activity for Some Time to Come

Whatever may be the trend of new building projects, work already under contract is very large and sufficient to insure activity in the building industry for the balance of the year at least. Despite the falling off in new contracts placed during July and August, the volume of new lettings from January 1 to the end of August was still 6 per cent larger than in the corresponding period of last year and the largest on record.

Reflection of this heavy building program appears in the increased business for the building materials industries. Lumber orders have been increasing steadily throughout the year and in the week of September 20 were reported by the National Association of Lumber Manufacturers at peak for the year. Orders placed for structural steel during August totaling 356,250 tons, or 95 per cent of manufacturing capacity, were the largest for any month on record. Production and shipments of Portland cement were also larger than in August of any previous year.

Hurricane Damage

The disastrous hurricane which swept through the West Indies and a section of Florida causing heavy loss of life and damage to property has created a need for emergency relief to which the nation no doubt will make generous response. Porto Rico and islands of the Leeward group were hard hit, and a large section of the population rendered homeless and temporarily dependent upon public relief. No definite accounting of property damage has yet been possible. In Porto Rico, however, it appears that somewhere between 20,000 and 30,000 tons of sugar left over from this year's crop were damaged, while damage to the next crop is estimated at somewhere between 150,000 and 200,000 tons. Fortunately the damage to sugar mills was not generally serious, and most of them will be in condition to grind at the beginning of the season. The coffee crop apparently has been destroyed and tobacco seedbeds washed out, but while these crops are important in Porto Rico they are not important factors in world markets.

In Florida the storm caused an appalling loss of life and property damage within a small area about Palm Beach and Lake Okeechobee. Taking the State as a whole the damage was negligible and in many parts there was little to indicate a hurricane was raging elsewhere in the State. In Tampa and immediate vicinity, for example, the wind at no time exceeded thirty miles per hour. Reconstruction work in the devastated area may be expected to take place rapidly, and Winter visitors need have no anxiety about finding the usual accommodations and facilities for recreation.

Winter vegetable lands in the Okeechobee area were flooded, but there is still time for replanting and growth before Spring. In any event total output for the State would be little affected. Damage to grape fruit amounts to about 15 per cent, according to a preliminary report of the Florida Citrus Exchange, and to oranges about 6 per cent, but as this year's crop was a record and threatened to be burdensome the storm may actually result in a better net return to growers than would otherwise be the case.

Industrial Activity

Steel production during July and August was at record levels for the Summer months, and apparently September will show further increase as current operations are estimated at 85 per cent of capacity compared with 75 per cent a month ago. That total production for the year will set a new record for all time seems a foregone conclusion.

Automobile production in August broke all monthly records with 458,429 cars, a figure which compares interestingly with Great Britain's total of 231,000 for the entire year 1927, Great Britain being the next largest producer. The automobile accessory industry is being equally stimulated, and production and shipments of tires are breaking all previous records.

The following figures from the latest report of the Federal Reserve Bank of Chicago, comparing production and sales of farm equipment manufacturers in that Federal reserve district for July with July a year ago, is evidence not only of the prosperity of the farm implement industry, but of the purchasing power of its customers, the farmers.

Domestic sales increase July 1928 over July 1927	29.8%
Export sales increase July 1928 over July 1927....	51.8%
Increase for these two combined..........................	33 %
Production increase July 1928 over July 1927....	25.9%

Gasoline prices are undergoing some recession now that the season of heaviest consumption is past. This is expected, and fundamentally the oil industry is in better shape thanks to the voluntary restriction of production in the mid-continent field. The active drilling under way in California and the rapidly mounting production in Venezuela, which has risen to second place among producing countries out-stripping Mexico and Russia, are the chief disturbing features of the situation. Recently, however, efforts have been made to extend the principle of controlled production to foreign fields, including particularly Venezuela. Should these efforts be successful and excess production held in check, the steady increase of consumption may be counted on to restore equilibrium to the industry.

Prospects in the copper industry are the best in years due to heavy consumption here and

abroad and practical exhaustion of surplus stocks. August foreign and domestic shipments amounting to 143,638 tons were the largest in the history of the industry, making the total in the first eight months 1,078,784 tons as against 977,134 last year. Although mine production has been increasing and also established a new high record in August, total stocks of refined metal at the end of that month were only 55,000 tons, the lowest since the completion of statistics was begun. Reflecting this strong statistical position the price of electrolytic copper at New York rose from 14¾ cents to 15¼ cents, the highest since January, 1925, and a level which reflects very profitable operations for producers.

Lead, zinc and tin have been generally active and firm, with lead prices up ten points to 6½ cents, the highest since February.

The Soft Coal Industry

Production of soft coal has increased from 8,757,000 tons daily in the first week of August to 10,177,000 tons daily in the second week of September, reflecting the usual seasonal tendency and decline of stocks in the hands of consumers. Such stocks, according to the U. S. Bureau of Mines, amounted to 41,700,000 tons on July 1, compared with 48,300,000 tons on April 1, this year, and 75,000,000 tons at the beginning of the strike on April 1, 1927, indicating that abnormal reserves have been largely absorbed and present supplies are about normal. Production, however, has been more than ample to meet requirements and prices have continued lower than a year ago.

Since July 18 when the United Mine Workers released district organizations from adherence to the Jacksonville scale as a basis of new wage contracts, substantial wage reductions have been agreed upon in Illinois, the Southwest, and Central Ohio. Indiana and Iowa have still to make their deals, but reductions are certain. Pennsylvania and a large part of Ohio have gone non-union and have had reductions in effect for some time. The impossibility of maintaining the Jacksonville scale in union mines competing with non-union mines operating on a substantially lower wage basis has seemed plain enough all along, but it has required a long bitter struggle resulting in the practical break-up of the union to demonstrate it to those who thought otherwise.

Evidence that the coal industry has not been backward in the adoption of technical improvements aimed to promote efficiency appears in an interesting table published in the September issue of Coal Age and reproduced below:

COMPARISON BETWEEN EFFICIENCY IN 1919 AND 1926

	1919	1926	Increase, Per Cent
Average tonnage per man per day in all kinds of bituminous-coal mining	3.84	4.50	17.3
Average tonnage per mining machine per day in underground bituminous-coal mining	17,545*	20,895†	19.1‡
Percentage of underground coal cut by machine to all coal mined, bituminous-coal mines	59.2	71.7	21.1
Number of tons produced by strip mining, bituminous coal, per shovel, in year stated	30,030* 19,634	43,370† 41,275	44.4‡ 110.2
Percentage of bituminous coal stripped to all bituminous coal mined	1.2	3.0	150.0
Average daily tonnage per bituminous-coal mine exclusive of wagon mines	265.1	371.6	40.2

*1918. †1925. ‡1918 to 1925.

In explaining these figures the Coal Age has the following to say:

> The year 1918 was for strip shoveling a year of expansion, but as none of the plants had picking tables the stripped coal got a bad name. So in 1919, when the market slumped, the tonnage stripped declined heavily. It seems fairer, therefore, to quote both figures. One must remember that in 1918 coal was only beginning to be loaded underground mechanically; in 1925 a large quantity—6,243,104 tons—was so loaded. Here is where the improvement has been most noticeable but where from lack of statistics tabulation is not possible.

The showing for the industry is a good one, but unfortunately demand for coal has not increased commensurately with the increased capacity for production. Consequently the speeding up of output resulting from increased efficiency has tended not a little to accentuate overproduction, a condition which may be found to exist in numerous other industries as well as some branches of agriculture.

Textiles Irregular

Cotton spinning activities gained during August as compared with the July low point, but at 87.7 per cent of single shift capacity were still far below the level of 103.56 per cent in August last year. The report of the New York Association of Cotton Textile Merchants for August was encouraging, the figures indicating that despite an increase in production, both orders and shipments exceeded output for the first time since April, while stocks decreased and unfilled orders increased.

The fine goods industry at New Bedford, on the other hand, continues tied up with a strike, and notwithstanding that production in that center has been almost entirely suspended for 24 weeks, no indication of a goods shortage has yet developed, competing mills outside of that city having no difficulty in supplying the demand.

Prices on wool goods named for the Spring 1929 season showed mixed trends, but in the main the average was downward. Latest figures on mill consumption of wool, those for July, amounted to 32,797,000 pounds, a drop of 2,159,000 pounds as compared with June, and 1,370,000 pounds as compared with July a year ago. Reflection of difficult conditions in the industry appeared in the report of the American Woolen Company showing a net loss of $895,000 for the first six months of the year, compared with a deficit of $822,000 (before dividends) for the corresponding period of last year. (The latter figure was reported incorrectly here last month as a gain of $822,000.)

The New Raw Silk Exchange

Mention is in order here of the opening of the National Raw Silk Exchange in this city on September 11, the first silk futures market established in this country.

The opening of this new addition to the steadily growing circle of commodity exchanges in New York reflects the importance of New York as a world silk market. The United States consumes approximately 75 per cent of all the silk produced in the world and takes about 85 per cent of the Japanese output. Raw silk has become the leading item of our imports, reaching a total value last year of more than $412,000,000.

On this basis an annual volume of trading of more than $1,000,000,000 is estimated for the new exchange which would make it the largest silk market in the world.

Virtually every important branch of the silk industry, both here and abroad, is represented on the exchange, whose membership embraces silk and commission houses in Europe, Japan and China as well as in the United States. The authorized limit of membership is 265 and all seats have been taken. Though originally offered at $2,500 each, memberships since the opening have sold as high as $7,000.

Trading hours are from 10.30 A. M. to 3 P.M., except Saturdays, when the hours are 10:30 A. M. to noon. The unit of trading is 5 bales of 130 pounds each, valued in all at approximately $3,100 at current prices. The exchange has its own system of tickers and is in every way equipped with the most up-to-date facilities for serving the needs of the industry both here and abroad. It has the best wishes of the business community for success.

The Agricultural Situation

Although none of the principal crops are of record-breaking size the results are generally above the average and the aggregate all round farm production probably is the largest ever known. Although the prices of grains have declined under the influence of larger supplies, the declines apparently are not disproportionate to the larger yields, and it is believed that aggregate farm purchasing power is larger than at any time since the war.

Live stock and dairy products are on a profit-yielding basis, although hogs have suffered a decline in the past month. Notwithstanding the fact that dairy products have been bringing remunerative prices throughout the entire period of post-war agricultural depression, production shows no relative increase over consumption. Indeed the make of butter during the last Summer was lighter than in the Summer of 1927 and smaller stocks were placed in storage. The butter situation therefore is quite satisfactory from the producer's standpoint.

The feed grains are lower in price in consequence of the larger crops, for the surplus above the requirements of the animals on farms is a depressing factor. The prices have improved slightly in the past month.

Wheat this season has had extreme fluctuations, illustrating the difficulties of forecasting crop yields. The Winter crop in this country came into the Spring in very poor condition. The Government report issued May 9 estimated acreage abandonment at 25.1 per cent, at which an average yield would give a crop about 75,000,000 bushels below the crop of 1927. Furthermore, drought was prevailing in the Spring wheat territory and the outlook for European crops was poor. Under this combination of unfavorable news foreign buying came into the markets and speculation was stimulated to such an extent that wheat in Chicago advanced to $1.70 per bushel.

Since the May report was issued, however, conditions everywhere have improved steadily. Each succeeding Government report has indicated a larger crop in this country until that for September estimates the combined Winter and Spring yields at 901,000,000, or 28,475,000 bushels above the 1927 total.

Moreover, according to the Canadian Government report, Canada has come through with a wheat crop of 550,000,000 bushels, or 110,000,000 bushels in excess of the 1927 crop, and the largest on record. Furthermore, the wheat crop of Europe is now estimated to be 8 per cent larger than last year's, with the rye crop also larger. The Department of Agriculture in Washington, under date September 17, estimates that thirty countries which in 1927 produced 2,989,000,000 bushels have in 1928 produced 3,188,000,000 or an increase of approximately 200,000,000 bushels. These countries produced last year 85 per cent of the world's production outside of Russia and China.

Decline of Wheat Prices

Under the influence of the changed crop conditions, market prices declined steadily. Since then they have rallied to about $1.17 for the December delivery, which compares with $1.31 on the same day last year.

The record-breaking crop and large carry-over in Canada, taken in connection with one of the largest crops ever grown in this country, and no shortage anywhere, with a good start for the crops in Argentina and Australia, had the effect of dissipating any theories of wheat scarcity this year and put sellers at a disadvantage in the markets. That prices should decline under the load of offerings and in view of prospective supplies does not seem extraordinary.

The decline, however, has been made the occasion of a new outburst against the "gamblers" of the grain exchanges, who are accused

of having robbed the farmers of the difference between the price of wheat per bushel now and the price to which it was carried in the excited bidding of last Spring. The critics apparently think that the scarcity price should be maintained for the bumper crop. It would be pertinent to ask what price would be ruling in the markets of Canada and the United States today if there were no grain exchanges to facilitate trading in futures. The Winter wheat crop of this country moved to market with unusual rapidity this year, particularly in the Southwest, where the combine harvester was a large factor. Who would have bought the offerings, and at what price, if there had been no grain exchanges?

The grain trade has manifested much interest in the weekly market review of Broomhall's Corn Trade News, the Liverpool authority, which appeared under the date August 14, 1928, in which an opinion is expressed that the decline of wheat prices had been aggravated by ill-advised policies on the part of the Canadian Wheat Pool. The article says, in part:

> We have now reached a period when the world is confronted with a plethora of Wheat in esse or in posse, a season when all the important surplus countries have good crops. North America alone has grown and is on the point of harvesting a surplus sufficiently large to feed all Europe's deficiency countries. In addition, the fast maturing crop in Australia is promising a large surplus and the growing crop in Argentina has made a good start on an increased acreage.
>
> Ever since the pools entered upon their career of controlling the price of Wheat there has been at the end of each season a gradually accumulating volume of surplus Wheat—this year it is six million quarters larger than it was a year ago, and a year ago it was larger than a year previously, and so on with but little variation, back to the time when the present Pool policy originated. We are now entering upon a new season and can see in North America an accumulation of Wheat about as large as that which we have been accustomed to see in mid-winter when elevators quite naturally are usually full up with winter reserves.

The theory advanced by the critics is that the Pool management after carrying important holdings through the period of high prices last Spring finally dumped them on the eve of the new harvest, when the markets were already declining under the influence of record-breaking new crops.

The carry-over of wheat in Canada at the end of the crop-year, August 1st, was larger than heretofore, estimated at 76,000,000 bushels, but how the ownership was distributed is not of public record. The Pool management claims that it entered the new year well cleaned up, but, even so, if the cleaning up was done on a large scale in July, it would have been a factor in the market decline which occurred in that month and August.

The Cotton Crop

The Government's September report on the cotton crop, released on the 8th ult., indicated a crop of 14,439,000 bales, which was slightly above expectations, and started a price decline. The spot price touched 19.50 on the 8th and reached 17.65, the low point, on the 15th. Storms and excessive precipitation, all the way from the Carolinas to Texas, reversed the movement and on the 27th the highest price of the month, 19.60, was reached.

Consumers have been cautious buyers until within the past ten days, but the persistent reports of unfavorable weather have brought them into the market. Until the middle of September the trade was looking for a 15,000,000 bale crop, which would compare with 12,955,000 bales last year, but present opinion seems to range between 14,000,000 and 14,500,000 bales. The Government estimates that the carryover of American cotton on July 31st was 2,700,000 bales less than last year. At 14,500,000 bales the aggregate supply for the ensuing year is approximately 1,000,000 bales less than last year. The demand for cotton goods in the domestic market is now improving and it is believed that world consumption will be larger this year.

Money and Banking

The money market has shown no pronounced change in the last month, although it has given evidence of an increased pressure of demand, particularly at the middle of the month, when income tax payments and Treasury financing were temporary factors.

Notwithstanding the prevailing trade activity the commercial loans of reporting member banks have shown no rise in volume and rediscount borrowings of these banks at the Reserve bank, as appears by the consolidated statement of September 26, have actually declined to the lowest figures shown since June. The demand for non-commercial uses, however, has been strong.

Quotable interest rates have changed but little. Federal Reserve rates are unchanged. Eligible commercial paper has been readily handled throughout the month, at 5½ to 5¾ per cent, but time loans on collateral security, which were 6½ per cent at the beginning of the month, advanced to 7¼-7½.

The Acceptance Situation

Acceptance rates for all maturities were lowered ⅛ per cent on August 31. The market situation regarding this class of paper has improved in the month, largely as the result of increased foreign participation in this market, but partly by reason of a more liberal attitude on the part of the Reserve banks. Acceptance business, which consists mainly of bills arising in international trade, is particularly open to international competition. Last year the volume handled in New York was largely increased as a result of lower rates

in New York than in London or on the continent, but this year the tables are turned. When rates were advanced in July the outlook for this market seemed dubious, but since then for the reasons stated the prospects for dealers' turnover have improved.

The Federal Reserve Bulletin for September gives the following table showing the volume and distribution of acceptances outstanding on July 31 of 1927 and 1928:

(In Millions of Dollars)

	July 31, 1927	July 31, 1928	Increase
Total outstanding	741	978	237
Held by Federal Reserve banks, total	309	468	159
For own account*	158	162	4
For account of foreign correspondents**	151	306	155
Held elsewhere	432	510	78

* Bankers' acceptances in dollars held by Federal Reserve banks.

** Contingent liability of Federal Reserve banks on bills purchased for foreign correspondents.

It will be seen that the volume outstanding this year was larger than last year by $237,000,000, but that the holdings of the Reserve banks for foreign correspondents were larger by $155,000,000.

Reserve bank holdings have increased from August 1 to September 26 by $97,000,000 for own account and probably have increased for foreign account. How distribution to other buyers will hold up under present rates remains to be seen. Mr. Robert H. Bean, Secretary of the American Acceptance Council, in a statement, dated September 19, says:

> With the rates for acceptance financing now ruling at a level which makes dollar credits as favorable, as to cost, as those offered in foreign money markets, it is certain that our volume will show an increase of more than $200,000,000 when the commodity movement now under way makes its full demand on the accepting banks.
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> Some apprehension has been felt concerning the ability of the acceptance market to move such a heavy increase in bills. In competition with higher yields in the call, time, and commercial paper markets, the prevailing low price of discount does not serve to attract the banks, as investors, any more than they do a large class of outside purchasers ordinarily ready buyers of bills, although the market has shown some improvement during the last three weeks.
>
> The relief may be found in the strong support of the Federal Reserve Banks which are now beginning to buy heavily in the open market, with indications of further substantial increases in their bill holding account during the autumn.

It is desirable of course that the substantial gains made in the last year in the development of a domestic bill market shall not be lost through the change in market conditions, and the Reserve banks are disposed to give substantial assistance to the dealers. There is reason, however, to apprehend that although the volume may be maintained, domestic distribution will fall off to some extent.

Loans on Stocks and Bonds Increase

Reporting member banks increased their loans on stocks and bonds by $139,000,000 from August 29 to September 19. Brokers' loans by member banks in New York City increased by $289,000,000 from August 29 to September 26. Brokers' loans upon the dates named were distributed as follows:

	September 26	August 29	July 25
For Own Account	$849,000,000	$798,000,000	$828,000,000
For Out-of-town banks	1,674,000,000	1,535,000,000	1,552,000,000
For Others	2,001,000,000	1,907,000,000	1,808,000,000
Total	$4,524,000,000	$4,235,000,000	$4,183,000,000

A marked increase of the percentage of call loans in the total has occurred since June. On June 27 call loans constituted 75.5 per cent of the total and time loans 24.4 per cent; on August 29 call loans were 80.7 per cent and time loans 19.2 per cent; and on September 26 call loans amounted to 84.9 per cent of the total and time loans 15.0 per cent.

The total of these loans now is $38,534,000 below the record figures of June 6 last, after having been down $404,000,000 at the low point of the slump, which was on June 27.

Loans for account of "others" are now $1,073,000,000 above the total in the first statement of the year, January 4, and the season has arrived when they might be expected to decline, inasmuch as for the most part they represent funds belonging to corporations, whose own needs for money may be expected to increase at this season. It will be interesting to see whether this group of loans maintains its present size in the coming weeks. If it does, it will signify that business the country over is adjusting itself to get along with less funds than usual, in order to take advantage of the high interest rates paid on brokers' loans.

The rising proportion of call loans over time loans signifies that an increasing proportion of the lenders desire to have their funds under day-to-day control. Any falling off in loans for the "out-of-town" banks or "others" groups, or failure of these groups to meet the demand, increases the pressure upon the New York City banks, with whom the members of the stock exchange have relations as depositors. These banks, whose managements are endeavoring to get out or keep out of the Reserve banks, and have no desire to pledge eligible collateral for the purpose of obtaining ineligible paper, naturally prefer to keep their holdings of the latter in the form of day-today loans.

The Money Market Ruled by Supply and Demand

An example of persistent comment, often heard but highly superficial, is that which stresses the boundless wealth of this country, and reasons therefrom that there must be plenty of credit available and that current interest rates are artificial and unjustified. All

of the productive wealth of the country undoubtedly may be counted as having bearing upon interest rates in the long run, but at any given time bank rates are determined by the available supply of bank credit and the demand therefor. Everybody should know by this time that the member banks are loaned up to the limit of their capacity under the law, and can only increase the total of their credit outstanding by rediscounting operations with the Reserve banks. This they can only do by tendering eligible paper, as defined by the Reserve act, which is in limited supply and constitutes their own resource against emergencies.

As a result of this situation, a difference of approximately 1½ to 2 per cent now exists between the rates on eligible paper and the rates on ineligible paper, and this for perfectly valid reasons, fully understood by the authors of the Reserve act. In the one case the supply of credit is adjusted to the demand at the rates fixed by the Reserve authorities, and in the other case the supply for the present is a practically fixed quantity and the demand must adjust itself thereto as best it can.

If the rates on stock exchange collateral were lower than they are the supply of funds presumably would be lower. Interest rates on these loans are fixed in the same manner that the prices of the stocks are fixed, i. e., by bidding in the market. The process is no more artificial or unreasonable in the one case than in the other. The law of supply and demand is as unimpeachable an authority in the one case as the other, and would be as easily controlled in one case as the other.

That the difference existing now between the rates on eligible and ineligible paper is abnormally high undoubtedly is true, but it is so because the differing relations between supply and demand in the two departments of the market make it so. That situation will correct itself in due time. With trade and industry generally working on smaller margins of profit than ever before it is not likely that Wall Street loans are on an established basis at 7¼ to 7½ per cent.

The Factor of Bank Reserves

It is continually apparent that the limiting influence of the legal reserve requirements are not understood by many persons who comment upon current banking conditions. "Why," it is frequently asked, "should rising prices for stocks tend to make money tight?" "If a buyer borrows money for the purchase of stocks he pays it to the seller, and does not the transaction release as much credit as it ties up?" Obviously it all depends upon what the seller does with the proceeds of his sale. If he applies the entire sum to the payment of debt, the aggregate of existing indebtedness is not increased; on the other hand, if he buys something with it and no debt cancellation occurs in connection with the transaction, there will be no offset to the increase of indebtedness, and if he buys something on a margin the volume of indebtedness will be increased again. The extent to which this process of pyramiding may be carried on by the expansion of bank credit is limited by the reserve requirements. Every increase of bank loans affects the reserves, either by reducing the holdings of cash or increasing deposits and thus increasing the reserve requirement.

No Change in Reserve Policy

No change has occurred in Reserve policy. Reserve holdings of open market bills have increased by $97,000,000 since August 1, but in these purchases, as in rediscounts, the Reserve banks do not take the initiative, but accept everything entitled to discount that may be offered at the fixed rate. Purchases of United States securities are insignificant and rediscounts are lower in the September 26 statement than in any statement since June.

Governor Young, of the Federal Reserve Board, in an address before the Indiana Bankers Association on September 20, stated that according to past experience additional Reserve credit to the amount of approximately $300,000,000 would be needed between that date and December 31, to meet the "usual seasonal requirements of agriculture and business," and added:

"It is the expectation of the system that this additional credit will be secured by the member banks rediscounting without hesitancy to take care of these requirements, and they will lend to their customers at reasonable rates.

"It further expects that this additional reserve credit will not be used in further expanding a bank credit situation that grew up when our gold reserves were $500,000,000 larger than they are now and which has continued to grow while the reserves have been shrinking.

"If, after January, 1929, following the return of holiday currency, the banks still owe the system approximately $1,000,000,000 in rediscounts, I, personally, will feel that the situation has been handled admirably, and I shall have no cause for concern, because with the tradition which the member banks have about borrowing continually from the Federal Reserve system, a debt to the system of $1,000,000,000 will have a more moderating effect upon the too rapid growth of bank credit than any other single condition that I know of."

This sets forth the Reserve attitude toward the existing credit situation about as it has been understood in banking circles to be. The Reserve banks will release credit to meet the increasing demands of Fall business, but expect to recover it in the period of relaxing demands which follows the holidays.

The Governor expressed the opinion that the Reserve system was functioning as it was intended to do, and that conditions have more to do with making Reserve policies than Reserve policies have to do with making market conditions, which in the large sense is true,

although it does not signify that Reserve policies are unimportant.

Foreign Money Markets

In view of the high rates prevailing for time money in this market it would seem logical for gold to move this way, and sterling exchange is approximately at the point where transportation costs from London would be covered and possibly a profit cleared. One shipment of $2,500,000 has come and more is expected, but in view of the fact that the high rates for money here are not due to industrial or commercial demands there is a feeling in financial circles that in the long run the movement of any considerable sum from Europe to this country may prove to be disadvantageous both there and here.

The world has most to gain by stable industry and trade, and although day-to-day money and for short periods is now cheaper in several foreign markets than here, this is not generally true of capital funds. The Commonwealth of Australia had a $35,000,000 five per cent loan, 1945-75 on the London market in July at 98, and the rate was not good enough to make it go well. Paris has a plethora of short-term money, but long-term rates do not correspond. There is no likelihood that any gold will leave France this year, as the Bank of France still has large credits abroad upon which it may be expected to draw to meet all demands for exchange.

Germany has been persistently acquiring gold in the last year, the reserves of the Reichsbank having been increased by approximately $112,000,000 in that time. Much of this has come from Russia, but recently considerable amounts from London, the latter undoubtedly the proceeds of loans negotiated there and in the United States. Nevertheless, all interest rates are very high in Germany. The Reichsbank discount rate has been 7 per cent since last October, and money from month to month is 8 to 9 per cent.

One of the incidents of the money situation has been the payment of $12,000,000 of six-months Argentine Treasury bills held by American bankers, which fell due on September 26. In view of market conditions at this time the Argentine Government has elected to retire them and to do so by a shipment of gold. Argentina is very strong in gold reserves, as the result of its large importations during the past year, and can readily spare this amount and more.

On the other hand, Canada is beginning the movement of the largest crop in her history, and as she is accustomed to draw on New York for gold as the basis of the necessary credit operations at such times, the movement for that purpose this year may be larger than heretofore.

All things considered, nothing in sight affords substantial promise of easier money during the remainder of this year.

The Bond Market

During the month of September bond price averages were subject to but slight variations with a gradually firming tendency indicating the relative stability of the market around present levels. The volume of new issues is still much below that maintained during earlier months in the year, but dealers are willing to make new commitments, though scrutinizing new issues carefully and insisting upon conservative pricing. That there is a substantial capacity for investment still unsatisfied is evident from the readiness with which recent new offerings have been absorbed.

Recent surveys conducted by leading investment houses indicate that there has been substantial liquidation among dealers during the past sixty days and that dealers' stocks are now down to a point where a larger volume of new issues properly priced could be moved quickly. Although the firmer credit situation will perhaps prevent any substantial forward movement in prices, the opinion prevails generally among dealers and larger institutional investors that prices for long term investments are now well adjusted to the current credit situation and that further substantial declines are quite improbable. Should there be an easing of credit through stock market liquidation, gold imports or other causes, this change would be immediately reflected in a more active market for long term fixed interest bearing securities.

Current U. S. Treasury Financing

As one of the final steps in the refunding of the Third Liberty 4¼s which matured on September 15th, the U. S. Treasury Department announced on September 7th a new issue of nine-months 4½ per cent Treasury Certificates of Indebtedness dated and bearing interest from September 15th and maturing June 15th, 1929. The offering was for cash at par and also for exchange at par of maturing Third Liberties. Total subscriptions received amounted to $1,020,034,400 and total subscriptions allotted $549,615,900, made up of allotments in full for $103,153,900 Third Liberty 4¼s tendered in payment and allotments for cash of $446,462,000. Banks have recently been notified of an additional offering of Treasury Short Term securities to be made early in October to finally complete the program of refinancing the maturing Third Liberty Loan.

The final redemption of this Third Liberty issue brings to a close the vast operations begun last year which in the course of eighteen months have resulted in the refunding or re-

financing of over $5,000,000,000 of maturing Liberty issues. About $1,300,000,000 were retired from sinking fund and surplus, the balance being replaced by long term bonds bearing 3⅜ per cent interest, by 3-5 year notes bearing 3½ per cent interest and by short term certificates including the two current offerings, all maturing on quarterly tax payment dates.

Municipals Steady

A fair balance between current supply and demand seems to have been achieved in the municipal field and prices appear well stabilized at present levels. Buying inquiry from institutional and private investors, while moderate, has been sufficient to absorb the relatively light influx of new offerings. Prices for high grade issues have recovered about .15 of a point in basis from the low figure established last month due in part to the scarcity of offerings among dealers. Far from being over-stocked, most dealers report a satisfactory current position. Shelves have been well cleaned of issues which were hanging over the market after the depression earlier in the summer.

Convertible Bonds on the Up-grade

Pronounced activity in convertible and warrant-attached bonds was an outstanding characteristic of the general bond market during the month. Heavy transactions in such issues usually accompany an active and rising stock market because such bonds naturally follow the price trend of their respective stocks after the share price has reached the conversion figure. The current high prices of many convertibles indicate the substantial profits derived by investors who have stayed with such issues over a period of years and show the value which often accrues to the investor through the right to transmute the status of his investment from that of an obligation to that of ownership in the business.

Among the convertibles showing special strength were the Anaconda Copper Convertible 7s, the Andes Copper Convertible 7s, Brooklyn Union Gas Convertible 5½s, Public Service Corporation Convertible 4½s, Associated Gas and Electric Convertible 4½s, Liquid Carbonic Convertible 6s, and Barnsdall A 6s with stock warrants. The Andes Convertible 7s were the most active of the list and showed the most substantial gains. These bonds are convertible into stock at the rate of 44 shares per $1,000 bond and at a current price of around 156 give a value to the stock of about 35½. The Andes properties, located in Chile, are being developed by Anaconda which holds 51 per cent of the authorized 3,600,000 shares of common stock. Complete conversion of the $39,890,000 of the Andes 7s now outstanding would add 1,755,160 shares to the outstanding capitalization. It is anticipated that a substantial block of Andes common to be obtained by banking interests through conversion of bonds will be offered shortly for public subscription, thus creating a public market in this security for the first time. Responding to advances in the stock of the Anaconda Copper Company the convertible 7s of this company advanced to new record levels. Conversion of the 7s is proceeding satisfactorily, announcement having recently been made of complete exchange of the second block of $10,000,000, which means that converted bonds now aggregate something over $20,000,000. The conversion basis is on a sliding scale, changing with each $10,000,000 presented. The present conversion price is 59 and will become 62 when conversion of the present block has been completed.

The Functions of Central Banks

The change in the credit situation in this country which has occurred in recent months, as evidenced by higher interest rates, and the disinclination of the Reserve banks to release more credit except by rediscounting paper for trade purposes, has developed differing opinions upon Reserve policy. We have commented upon the situation at some length heretofore, and last month stated that in this issue we would discuss the functions of central banks.

These functions have developed by a process of evolution, and are much the same in all countries, although naturally varying to some extent with business practices. These institutions are established, given a semi-official status and endowed with special powers, notably the right of note issue, to enable them to perform certain functions which are deemed of vital public importance. They hold the gold reserves, issue the national currencies and are charged with maintaining the currencies at par. This duty involves firm control over the expansion of their own credit, which is the final contribution to the total supply of bank credit. It is a matter of common knowledge that even a small surplus or deficit in the supply of any commodity will have a disproportionate influence upon the market price of that commodity, and the same principle holds good in the case of credit. A central bank provides but a small portion of a country's total credit supply, but since it is the marginal portion, and takes care of the fluctuations of demand, the central institution holds a very influential and responsible position.

Upon central bank policy depends the security of the currency and the stability of the entire business situation. These institutions do not exercise authority over the loans of other banks except as the latter apply to them for credit. Then of right and necessity they take account of the manner in which credit is

being used, and determine whether or not they will supply more, exercising their authority for the common protection and welfare. In nearly all countries the uses to which central bank credit may be applied are strictly defined and limited. It is vital to the system that the central bank shall have the power to defend its own reserves.

An Illustration from Germany

How far they may go in the exercise of this authority has been strikingly illustrated in Germany since the stabilization of the currency after the great inflation. The new Reichsbank, the central bank of Germany, was established in 1924 with Dr. Hjalmar Schacht as its head, and provided with a gold reserve by means of a $200,000,000 foreign loan contracted by the German Republic. The prices of all German securities were very low at this time, and trading in them was limited on account of the limited amount of bank credit available. As confidence in Germany increased in other countries, foreign loans began to be negotiated and the proceeds came into possession of the Reichsbank in exchange for the new German currency.

These loans revivified Germany, put money into circulation, created bank deposits and, incidentally, trading on the Bourse, or stock exchange, revived. As prices advanced speculation increased, and by the early part of 1927 a great boom was under way, which to an increasing extent absorbed the limited supply of liquid German credit.

Dr. Schacht, who in decision and strength of character was one man in a million for his job, looked on with disapproval, and one day, May 13, 1927, something happened, described briefly in the following news report:

> The decision of the Berlin Stempelvereinigung (an association of the principal Berlin banks) to curtail contango credits granted for operations on Stock Exchange by 25 per cent, caused a slump in prices on the German Bourses on May 13th. This measure of the banks originated from the Reichsbank, which holds the view that the sharp rise in prices on the German Stock Exchanges during the last few months in no way agrees with the general standard of economic conditions in Germany, and that such price movements have not developed in a natural manner, but are chiefly attributable to a too lavish supply of credits for Stock Exchange transactions.

The Berlin correspondent of the London Economist, writing a few days later for the May 18, 1927, issue of that paper, gives further particulars, as follows:

> The immediate cause was the announcement on May 12th by the leading banks which compose the Berlin Stempelvereinigung that they would reduce their prolongation credits and advances on securities by 25 per cent before mid-June, and by a further unstated proportion after that date. The declines of the preceding days had already frightened a great number of weak holders who had bought at or near top prices; and the banks' announcement led to wholesale casting of stocks on the market, with very few buyers in sight. The panic was so severe that the Bourse Committee decided not to quote at all such stocks as lost more than 12½ per cent of their prices of the preceding day, and under this rule the first quotations for about half the stocks on the "futures" list were omitted.

The Economist correspondent, commenting upon the incident, says that "The prevailing view is that the contraction of speculative credits was necessary, but that the time and method was not well chosen." It is doubtful if either the time or method of such an enforced reduction ever would be generally acceptable. Unquestionably it was a very drastic proceeding, justified only by extraordinary conditions. We refer to it only as illustrating the accepted view that a central bank is justified in using its influence to control credit expansion, if its own reserves are ultimately menaced or the stability of the general business situation seriously affected. A considerable portion of the capital in use in the Berlin market was foreign capital employed there in short loans, and its withdrawal would cause demands upon the Reichsbank reserves.

It should be said that while the Berlin banks defended themselves against the criticisms of indignant speculators by saying that the action was dictated by the Reichsbank, Dr. Schacht's version was that he simply urged that stock exchange operations were taking too much credit and that the banks should get themselves into a more liquid position. The annual report of the Reichsbank for 1927 makes a brief reference to the episode, as follows:

> The rates paid for Stock Exchange money reached so high a level, in comparison with the very much lower rate in the bill market, that foreign money was attracted on a considerable scale on short term to finance the requirements of the banks and Stock Exchange in this connection. The development of the position on this occasion showed that the Reichsbank rate (which after all is a discount rate and as such is applicable only to one part of the operations of the money market, that is to say, the discount of bills) is not always in a position to influence effectively the inward and outward movements of foreign capital. The Reichsbank accordingly was at pains, in order to prevent excessive credit facilities being accorded by the banks for outside purposes beyond the control of the Reichsbank rate, to direct attention on more than one occasion to the need for the maintenance of adequate liquidity in private banking business. These indications met with an appropriate response in the shape of restrictions on Stock Exchange credit transactions.

The Belgian Situation, 1926-1928

A more typical illustration of central bank policy has been afforded by the action of the National Bank of Belgium in dealing with the stock market boom which has been in progress in Belgium since the stabilization of the currency was effected in October, 1926.

Stabilization was effected at a valuation for the currency only about one-seventh of its pre-war value. As industry revived, corporation shares, which had been depressed, began to conform in prices to the new currency. Excitement ran high, and culminated four months ago in a market crisis. The London Statist of July 28, 1928, contains a letter from its Brussels

correspondent which describes the situation and the action of the National Bank of Belgium. The letter says, in part:

Since October, 1926, the Stock Exchange had been exceptionally active and remained so until recently, with a slight and temporary set-back at the end of last February. The origin of the crisis that set in last month seems primarily to be due to the inexperienced enthusiasm of speculators drawn from every walk of life by the hope of easy profits: professional men, small "rentiers," farmers, even workmen. That the lure of speculation soon spread over the whole country is evidenced by the number of brokers' and banks' offices which have recently been opened in the smallest towns of Belgium.

The annual report of the National Bank of Belgium reproved the excesses of speculation, and, in presenting this to the shareholders at the general meeting in February, 1928, M. Louis Franck, Governor of the Bank, made a speech which contained strong warnings against unjustified rises in share values.

Towards the end of May the rise in share values stopped, and, in the first days of June, began the slump, which was particularly marked in the shares of electricity, metallurgical banking, and colonial firms. The forward or settlement market was the first to be affected, and to prevent a disastrous fall in share prices, the Brussels banks, headed by the Caisse des Reports, formed a syndicate to carry over the positions of defaulting speculators at the mid-June settlement. Another syndicate carried over the positions at the settlement at the end of that month.

Since that time there has been no renewal of market activity.

In the annual report of the National Bank, alluded to above, the Governor stated that the Antwerp and Brussels exchanges had been very active, and deprecated the fact that "certain classes of people, unfamiliar with such business, had been drawn into stock-market speculation." Of the policy of the Bank he said, in part:

By maintaining its rates at a high level for several months [7 per cent maximum], the bank reduced the total of its Belgian portfolio and of its advances. These rates could be maintained for a considerable period because the abundance of capital and the great prosperity of Belgian industries enabled them to support the high costs. When these costs began to be too heavy the bank gradually reduced its discount rate to 4½ per cent. In order, however, not to stimulate speculation, the rate on advances secured by Government funds was not reduced below 6 per cent.

It is true that this restrictive policy would not have been sufficient if the bank had not been able at the same time to concentrate under its management large capital sums belonging not only to the treasury but also to various official or semi-official organizations. According to the principles of modern financial science, it is essential that available funds of public or semi-public institutions shall be deposited in the central bank, which finds its position on the money market thereby strengthened. A large part of these available funds we invested in foreign exchange bills.

The last sentence shows that the Bank withdrew funds from the domestic money markets and placed them abroad, by which policy it would still have earnings from them while reducing the amount of funds available in the home market. It will be observed also that the rate of interest upon loans secured by Government obligations was not reduced below 6 per cent, although the rate on commercial bills was reduced to 4½ per cent. The latter rate has since been reduced to 4 per cent without change in the rate on the former. This is of interest in connection with a recent report that a Clearing House representing the banks of an American city had recently proposed to the Reserve Board that the Reserve rate for loans secured by Government bonds should be the rate of interest carried by the bonds.

The Belgian National bank, like the Federal Reserve banks, is restricted in the employment of its funds to commercial paper and loans upon obligations of the national government.

Bank of England Policy

The London "Statist," well-known financial journal, in its issue of August 18, 1928, has a lengthy article reviewing the banking situation in London over the past year. It describes the part which the Bank of England plays in the credit situation briefly as follows:

"It is in the possibility of expanding or contracting the aggregate amount of bank cash that we must look for the principal weapons of control over the total volume of banking credit in this country. Bank cash is expanded or contracted as a result, firstly, of purchases or sales of gold by the Bank of England and, secondly, as the result of purchases or sales of securities by the Bank of England. A purchase of gold by the Bank expands the volume of bank cash to an equal amount, while a withdrawal of gold from the Bank has the contrary effect. The Bank of England, by its open-market operations, can exercise conscious control over the volume of bank cash. By selling securities in the open market it reduces bank cash, by buying securities it expands it."

Imports and exports of gold of course are not within the Bank's control, except as it may influence them by its policies. It is obliged to buy or sell gold upon terms fixed by law. The discount rate and open market operations in securities are the means by which it influences the money market, which is true also of our Reserve banks.

The discount rate has stood unchanged since April 21, 1927, although the Bank has gained very largely in reserves in the meantime and over much of the current year a considerable body of opinion in London has held that the growing reserves warranted a reduction of the discount rate.

The Statist gives the following figures to show how much the Bank's position had been strengthened from the last week of July, 1927, to the corresponding week of 1928:

Date	Circulation (In £000's)	Bullion	Deposits	Securities	Reserve Ratio Per Cent
July 25, 1928...	136,016	176,020	118,375	76,697	50.4
July 27, 1927...	137,958	151,805	113,361	97,850	29.6
Difference	—1,942	+24,215	+5,014	—21,153	—

These figures may be multiplied by five to obtain an approximate conversion into dollars. It will be seen that the Bank's gold reserve increased by about $120,000,000 during the year, and that its security holdings declined by $105,000,000. This shows that instead of paying for the additional gold by means of note issues or book credits the Bank did so mainly

by the sale of securities. Only a relatively small increase of outstanding bank credit resulted. The Statist says:

"The authorities have evidently thought it undesirable to allow the gold influx to exert its normal influence on the credit basis, and have accordingly indulged in open-market operations designed to offset the effect of the gold influx."

The effect of this Bank policy was to keep interest rates in the open market at a higher level than otherwise would have ruled, and in harmony with the discount rate which it desired to maintain. The Statist explains the action as prompted by recognition of an impending change in the credit situation in the United States, which must soon influence the London market, and for which the Bank wished to be prepared. The Statist comments as follows:

"Had the Bank of England followed a rule-of-thumb policy and reduced its discount rate to 4 per cent last spring, there can be no doubt, firstly, that the gold influx into the Bank during the first half of this year would have been less than it actually was; secondly, that the gold efflux in the past few weeks would have been even more pronounced. In view of the developments that have taken place in the international credit situation, it may safely be stated that, had the Bank rate been reduced to 4 per cent last spring, it would have been necessary to increase it to 5 per cent soon after the inception of the seasonal autumn pressure. As it is, there is some likelihood of the Bank being able to meet the coming requirements upon it without raising its rate, and though the country has lost the advantage of slightly cheaper credit over the first half of 1928, it has escaped the necessity of having to pay more for its credit over the latter part of the year. In addition, it has gained by the stability that has been ensured thanks to the Bank's credit policy."

In this case, as in the foregoing references to actions of the Reichsbank and the National Bank of Belgium, our mention is not for the purpose of either approving or criticising the described action, but to illustrate the accepted functions of central banks. None of these central institutions hesitate to exert influence in the money market, and everywhere such action is taken as a matter of course, although particular acts are often criticised. Central bank authorities must be prepared to justify their policies at the bar of public opinion, like everybody else who is entrusted with authority or perform semi-official functions.

The Federal Reserve System

The Federal Reserve system was established upon the general principles already demonstrated by the central banks of other countries. Prior to its establishment, the country had a great number of independent banks, but scarcely a banking "system." There was little cohesion among the scattered institutions, little of responsible leadership, slight means of effective cooperation, no means of converting bank assets into currency to meet emergency demands or even to care for normal fluctuations in business needs. The country alternated between the extremes of credit inflation and deflation, as either tendency predominated, without guiding or restraining influence, subject to the danger of bank panics and without means of dealing with them. When a bank panic came, the only way of dealing with it prior to the enactment of the Aldrich-Vreeland law, passed shortly before the Federal Reserve Act, was by a general suspension of cash payments.

The essential features of the Reserve Act are the concentration of reserves, the provision for issues of credit currency and the establishment of central authority to maintain supervision over the general credit situation. It should be distinctly understood that the provisions for additional credit were not for the purpose of increasing the permanent volume of bank credit outstanding, but to create a reserve fund, available for temporary uses only, intended to cover the fluctuating demands for currency and credit, and thereby give greater stability to the business situation. The uses for which Reserve credit might be issued were definitely restricted.

As it happened, the Federal Reserve system began operations during the war, and as all rules and economic principles were subordinated to winning the war, the Reserve banks were soon made active agencies of the Treasury for raising funds, which resulted in their lending freely to the member banks to support the latter in lending to the public for the purchase of Liberty bonds, and so became extended to a degree that was abnormal, and upon a class of paper not ordinarily related to trade and industry.

This may be accepted as unavoidable, along with all the inflation of the time, but when the war ended the Reserve banks still had a fair margin of reserve above requirements. On June 30, 1919, the amount of outstanding Reserve credit was $2,354,167,000, and the gold reserve against combined note and deposit liabilities was 52.6 per cent. The war was over, and the last Government loan for new money had been floated. It has been the general opinion among bankers and economists that the brakes should have been put upon credit inflation at that time. The country did not need more credit to conduct its peace business than it had used to finance the war-time business. However, plausible arguments were offered against any restriction of credit. It was said to be important to have plenty of credit to finance the shift from war business to peace business, and low interest rates had been promised to borrowers who were subscribing for Government bonds.

On June 20, 1919, the Governor of the Federal Reserve Board in a letter addressed to all the Reserve banks sounded a note of warning saying:

The Federal Reserve Board is concerned over the existing tendency toward excessive speculation, and, while ordinarily this could be corrected by an advance

in discount rates at the Federal Reserve banks, it is not practicable to apply this check at this time because of Government financing.

The speculative boom of which the signs were then developing waxed stronger. On December 31, 1919, the outstanding credit of the Reserve banks aggregated $3,080,495,000, an increase of $700,000,000 in six months, and the reserve was down to 44.8 per cent. About this time a very cautious effort was made to hold inflation in check, but accomplished little against the speculative spirit then raging. Moreover, by this time gold was leaving the country in large amounts, and by the Spring of 1920 the Reserve banks were close to the limit of their powers of expansion under the law. On May 14 the gold reserve was only 42.2 per cent, and four of the Federal Reserve banks were borrowing of the others to avoid a deficit in their own reserves.

Conditions in 1920

The situation was grave. It always has been the case that the country requires more credit in the Fall months than in any other season, and with little power of expansion remaining bankers looked forward to that season with apprehension. A meeting of the Advisory Board of the Reserve system was held in Washington on May 18, and prominent bankers from various sections were invited to be present for conference. Fantastic stories have been told about this meeting by persons whose knowledge of banking was about on a par with their knowledge of the Greek alphabet, but it was held for the simple purpose of discussing practical means of providing credit for handling the crops and other regular business of the country in the Fall season. The general opinion expressed was that speculative operations of all kinds should be curtailed in such degree as might be practicable, and this has been said to have brought on the collapse of prices which came in the Fall. In truth such efforts as followed that meeting to accomplish the liquidation of speculative holdings were about as fruitful as the Reserve effort in the Summer of 1928 to reduce brokers' loans.

Expansion continued, Reserve bank holdings rising from $3,270,000,000 on May 14 to $3,421,976,000 on October 15. Reserves were practically down to the limit under the law. The theory that the May meeting forced credit contraction is without any basis of fact, but contraction came in the Fall, when prices gave way as the result of an over-strained situation and accumulations of commodity stocks all over the world. When prices began to fall, it developed that really there was no scarcity of sugar, cotton goods, wool, coal, foodstuffs or anything else but ready cash. And when the volume of bank deposits began to go off, and the value of collateral to shrink, the banks could do nothing but force collections. After that it was every man for himself and the-devil-take-the-hindmost.

Reserve Banks in the Same Plight as Other Banks

Furthermore, when the crisis came the Reserve banks were in the same plight as the other banks—extended to the limit. They had exhausted their resources in financing the inflation of prices, which by their assistance had gone much farther than otherwise would have been possible, and now, confronted by the very emergency which they were designed to avert, they were without means of dealing with it. In the language of the street, "they were all in." Their deposits went down with the deposits of the members banks, the collateral for their loans was the same collateral which the member banks had taken, and generally shrinking in value. They, like the member banks, were under the necessity of pushing collections to maintain their legal reserves and their solvency. All were in the same boat, because all had inflated together. The Reserve fund, instead of being a fund apart, for use only to stabilize and support the banking situation in time of need, had been mingled indistinguishably with all the other bank funds and was all in use before the real occasion for which it was intended had developed.

Of course, there were excuses. A strike on the railroads, with resulting congestion of shipments, was one. The high level of prices, resulting from a continuing round of rising wages and prices, was the common explanation offered for the need of more bank credit. This is an always present symptom of the inflation disease. None of these was a good alibi for the Reserve banks. They simply had failed to perform the principal function for which they were established.

Inflation the Primary Cause of the Crisis

Except as they contributed to the general inflation by their own inflation after the Spring of 1919 the Reserve banks were not blamable. It was the inflation and not the inevitable fall of prices which was the real cause of the collapse and depression of 1920-21. Under no condition could a reaction have been prevented after the great inflation of the war time, but if the Reserve banks had not made their contribution the inflation would have been less, and if they had been well-equipped with reserves when the crisis came they would have been much better able to give support to the member banks, and through them to the bank patrons best entitled to it. In the light of this experience it is evident that the expansion of Reserve credit in 1919-20 was a colossal mistake, and the lesson is one of warning against permitting the Reserve resources to be forced out into permanent use by a tight money situation which itself is due to the use

of credit for investment or speculative purposes. If the Reserve banks are to serve the purpose for which they were established they must keep their resources closely in hand, free from the periodical swings of speculation, and available for the maintenance of the gold standard and the support of the regular turnover of trade.

It cannot be too strongly emphasized that the strength of the Reserve system is in ample reserves. So long as any surplus reserve exists above the required minimum, somebody will be ready to argue that it ought to be in use, but stability and security are assured by the surplus. It is the cushion which takes up the shock of emergencies and maintains confidence. When the minimum is reached, drastic measures are in order which inevitably excite uneasiness and alarm.

World conditions at any time may make demands upon our banking reserves. The gold movement of the past year has taken more than 20 per cent of the actual gold holdings of the Reserve system and approximately one-third of their surplus holdings. The gold reserve percentage has dropped since September 28, 1927 from 73 to 65. We have seen that the drop from 52 per cent in June, 1919, to 42 in May, 1920, created critical conditions, but no heed was paid to warnings uttered between those dates. When inflation is under way the legal minimum is always too high for most people.

If it shall develop, as seems not improbable, that other countries, in greater need of additional credit resources than the United States, will absorb the greater part of new gold production for some years to come, the surplus reserves which we now have will be gradually needed as the legal basis of our own expanding volume of commercial credits, even though no further export movement of importance should occur.

Our Present Gold Reserves

Any suggestion that it is the part of prudence to conserve the reserves of the banking system is sure to be met with a chorus of exclamations to the effect that they are unnecessarily high. Is not the consolidated reserve 65 per cent, and is there not a billion of gold certificates in circulation which may be added to the present sum in the Reserve vaults?

It is true that the consolidated reserve against direct reserve bank liabilities at this writing is 65 per cent, and that to the extent that the reserve banks are able to get possession of the outstanding billion of gold certificates they will have command of the gold reserve behind them. It is important to consider, however, that this 65 per cent represents only the ratio of the gold holdings of the Reserve banks to their own note and deposit liabilities, and that this is practically the only reserve for all the bank deposits of the United States, and for the greater part of the paper currency in circulation.

Prior to the establishment of the Reserve system, all banks were required to keep specified reserves of cash in their own vaults; 25 per cent in the Central Reserve Cities, New York, Chicago and St. Louis, 12½ per cent in other Reserve Cities and 6 per cent in country banks; now only the Reserve banks are required to do so, because they have assumed the responsibility of supplying cash to the member banks of the system to whatever extent required. The State bank systems which require cash reserves are satisfied that such holdings shall be in currency. The holdings of the Treasury and the Reserve banks are practically the only reserves of gold.

The following table gives the figures for the gold holdings of the Treasury and Reserve banks, and the amount of bank deposits and of all forms of bank and Government currency in circulation, as of June 30, 1928. The annual report of the Comptroller of the Currency, which includes figures not only for the National banks but for all State and reporting private banks, is not yet available, but official figures for all member banks of the Federal Reserve system are available, and by comparison with the Comptroller's figures for all banks last year afford a satisfactory basis for an approximate estimate of this year's totals:

CURRENCY AND BANKING SYSTEMS OF U. S.
as of July 1, 1928

Total gold coin and bullion in U. S. Treasury and Federal Reserve banks		$3,732,000,000
All kinds of credit currency in circulation (outside Treasury and Reserve banks)		4,420,000,000
Individual bank deposits*:		
All commercial banks operating under National and State Charters	$43,642,000,000	
Reporting Private Banks	128,000,000	
Stock & Mutual Savings Banks	10,009,000,000	
	$53,779,000,000	
Deduct till money same date	847,000,000	
Net deposit liabilities		52,932,000,000
Total currency and deposit liabilities		57,352,000,000
Ratio of gold reserve to liabilities		6.50

* Bank deposits in other banks not included. Private banks are not required to publish condition statements, but many of them do and these figures are included in official reports.

The figures for the gold reserves include the gold held in the Treasury for the gold certificates in circulation. This gold cannot be considered as all available as general reserve, for

manifestly it would be impossible for the Reserve banks to gather up all of the certificates in circulation. Some of these have been destroyed and considerable amounts are held in private hoards and by banks outside of the Reserve system, but in this calculation the gold is given its full reserve value as though every certificate was held by the Reserve banks. The gold held against United States notes also is included.

The consolidated gold reserve of the credit system of this country as shown is 6.50 per cent instead of 65 per cent. We do not say that this is an alarmingly small reserve. It is not, for it is inconceivable that any considerable percentage of all the currency and bank deposits in the United States would be presented for payment. Nevertheless, the reserve is 6.5 per cent and not 65 per cent.

It is impossible to make an exact comparison between the banking situation of the United States and that of any other country, as precisely corresponding figures are not to be had, but an approximate comparison with the British situation is afforded by the following table.

The figures for British bank deposits are taken from the London Economist of May 12, 1928, and although they do not include all banks in Great Britain, Scotland and Northern Ireland it is probable that the omissions do not materially affect the calculation. If included they would increase deposits, probably without increasing gold reserves, and thus tend to lower the reserve percentage. Figures are not available for several large private banks, but on the other hand the deposits of reporting private banks in the United States as given in the above table evidently are incomplete.

Discount companies in London receive deposits, but the figures for three companies as given in The Economist combine the borrowings, deposits and undivided profits, hence we have omitted them. The total under this heading for the three companies is £93,854,000. Again, the deposits if included would tend to lower the reserve ratio.

On the other hand, bank balances with the Bank of England, and offsetting credits between the banks, swell the deposits, and elimination of these duplications would raise the reserve ratio. The form of bank reports in this country enable us to make this elimination in the first table.

Cash in hand consists of Bank of England notes or Treasury currency notes, which are included in the currency liabilities, and cash at Bank of England is a deposit there.

With these explanations this table is given:

CURRENCY AND BANKING SYSTEMS OF GREAT BRITAIN

as of December 31, 1927

Net gold reserves in Bank of England and Currency Note Dept. of Treasury		£185,855,000
Joint stock banks, deposits and notes	£1,893,000,000	
Scottish banks, deposits and notes	263,000,000	
Northern Irish banks, deposits and notes	53,000,000	
Private bank deposits	30,400,000	
Trustee savings bank deposits	81,400,000	
Total deposits	£2,320,800,000	
Deduct cash in hand and at Bank of England	375,000,000	
Net liabilities of above banks		1,945,800,000
Currency notes outstanding, less Bank of England notes in currency reserve		244,000,000
Bank of England deposits and notes outstanding		277,000,000
Total		£2,466,800,000
Ratio of gold reserve to liabilities		7.53

The Federal Reserve statement of September 26, 1928, shows an aggregate gold reserve of 65.1 per cent against the currency and deposits of the twelve Reserve banks, and the Bank of England statement of that date shows a gold reserve of 51.3 per cent against the notes and deposits of that institution. While the two tables given above are not completely comparable it seems to be safe to conclude from them that the aggregate reserves of this country at best are somewhat smaller in proportion to total bank and currency liabilities than those of Great Britain.

Importance of Effective Reserve Control

The Federal Reserve system is a highly geared mechanism surmounting the country's system of independent local banks, designed to unify them into an effective system, and to supplement their services in a manner which will give a degree of credit stability which never was had before. The final increment of credit which they supply is of magnified influence in the credit situation and should be handled with great discretion. An undue expansion of it would disturb the financial equilibrium between this and other countries and cause gold to leave the country. An expansion which would not be followed by a natural contraction would thus mean a permanent loss of reserve resources and consequent weakening of the system, as illustrated in 1919-20.

Although the reserve percentage of 6.5 against all currency and bank deposits is low as reserve percentages have been reckoned in the past, the magnitude of the actual reserve is an ample guaranty of security if the volume of bank credit is kept effectively in hand.

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